



## Bachelor of Science in Biology Pre-Optometry/Optometry

### Freshman - FALL SEMESTER - 17 hours

#### GENERAL EDUCATION REQUIREMENTS

- ENG 011 Freshman Seminar (1)
- ENG 104 English Composition I (3)
- PSY 113 General Psychology (3)
- PLS 131 US and MO Constitutions\* (1)

#### MAJOR REQUIREMENTS

- CHM 135 Chemistry I (5)
- BIO 214 General Botany (4)

**SUMMER: Work in office or shadow in several offices**

### Sophomore - FALL SEMESTER - 16 hours

#### GENERAL EDUCATION REQUIREMENTS

- CHM 335 Organic Chemistry I (5)
- PHY 214 General Physics I (4)

#### MAJOR REQUIREMENTS

- BIO 423 PRinciples of Cell Biology (odd yr) (3) -OR- BIO 433 Field Biology (even yr) (3)
- BIO 354 General Genetics (even yr) (4) -OR- BIO 314 Human A&P I (4)

**Summer between Sophomore and Junior Year: take OAT exam and begin application for school.**

### Junior - FALL SEMESTER - 18 hours

#### GENERAL EDUCATION REQUIREMENTS

- PHE P.E. Course (1)
- LIT Literature Course (3)
- HST History Course (3)

#### MAJOR REQUIREMENTS

- BIO 423 Principles of Cell Biology (odd yr) (3) -OR- BIO 433 Field Biology (even yr) (3)
- MTH 185 Analytical Geometry & Calculus I (5)
- MTH 127 Elementary Statistics (3)

### Freshman - SPRING SEMESTER - 17 hours

#### GENERAL EDUCATION REQUIREMENTS

- ENG 106 English Composition II (3)

#### MAJOR REQUIREMENTS

- BIO 204 General Zoology (4)
- CHM 145 Chemistry II (5)
- MTH 153 Precalculus (5)

### Sophomore - SPRING SEMESTER - 18-19 hours

#### GENERAL EDUCATION REQUIREMENTS

- CAS 101 Intro to Speech Communication (3)
- BIB 113/123 Old or New Testament Survey (3)

#### MAJOR REQUIREMENTS

- BIO 344 Microbiology (4) -OR- BIO 333 General Ecology (odd yr) (3)
- CHM 345 Organic Chemistry II (5)
- PHY 224 General Physics II (4)

### Junior - SPRING SEMESTER - 16-17 hours

#### GENERAL EDUCATION REQUIREMENTS

- Fine Arts Appreciate Course (3)
- LIT Literature Course (3)
- BIB 113/123 Old or New Testament Survey (3)
- PSY 323 Abnormal Psychology (3)
- PHE P.E. Course (1)

#### MAJOR REQUIREMENTS

- BIO 344 Microbiology (4) -OR- BIO 333 General Ecology (odd yr) (3)

**TO OBTAIN THE B.S. DEGREE IN BIOLOGY, STUDENTS MUST COMPLETE THE REMAINING COURSES (BELOW) AT THE UNIVERISTY OF MISSOURI - ST. LOUIS.**

### Senior - FALL SEMESTER - 20 hours

#### MAJOR REQUIREMENTS

- Opt 8010 A/P & Disease Processes (5)
- Opt 8020 Geometric (4)
- Opt 2030 Introduction to Optometry (1)
- Opt 8040 Neuroanatomy (4)
- Opt 8050 Biochemistry (3)
- Opt 8090 Case Based Discovery (1)
- Opt 8350 Epidemiology (2)

### Senior - SPRING SEMESTER - 23 hours

#### MAJOR REQUIREMENTS

- Opt 8090 Case Based Discovery (1)
- Opt 8110 A/P & Disease Processes II (5)
- Opt 8120 Ocular Optics (4)
- Opt 8140 Physical Optics & Photometry (3)
- Opt 8160 A & P of the Eye (5)
- Opt 8180 Clinical Optometry (5)

**\*required for non-Missouri high school graduates**

This is a proposed guideline. Please check the catalog and see your advisor for your final degree requirements.

Hannibal-LaGrange University reserves the right to make changes to degree plans without advanced notice or obligation.

The student is responsible for understanding and completing all general education, degree, departmental and graduation requirements.